

Darmani

2022 Hopper Quick Assembly Reference

1. Assemble Skid
(If your model uses a skid)

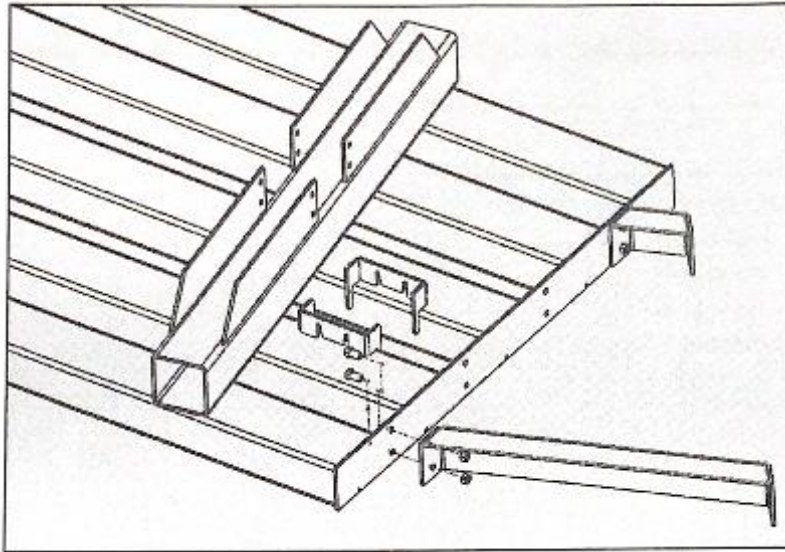


Figure 1 – Attach inner and outer interskid braces with supplied 1/2" bolts

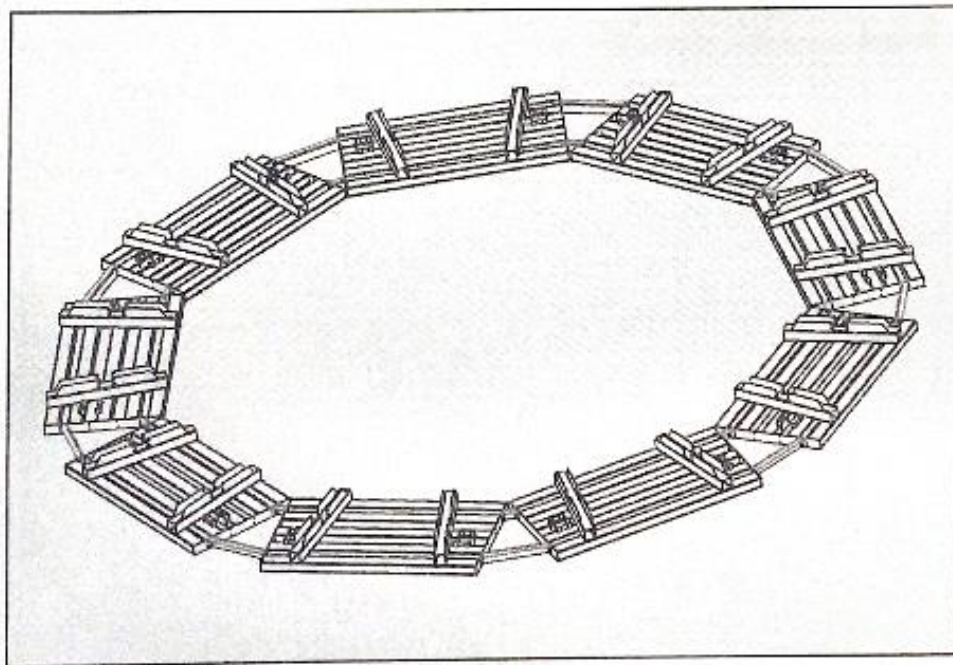


Figure 2 – Continue until skid is complete.

2. Assemble Ring

If you have a skid, place 4x4 blocks in where the legs will go, and assemble the ring on top of them.

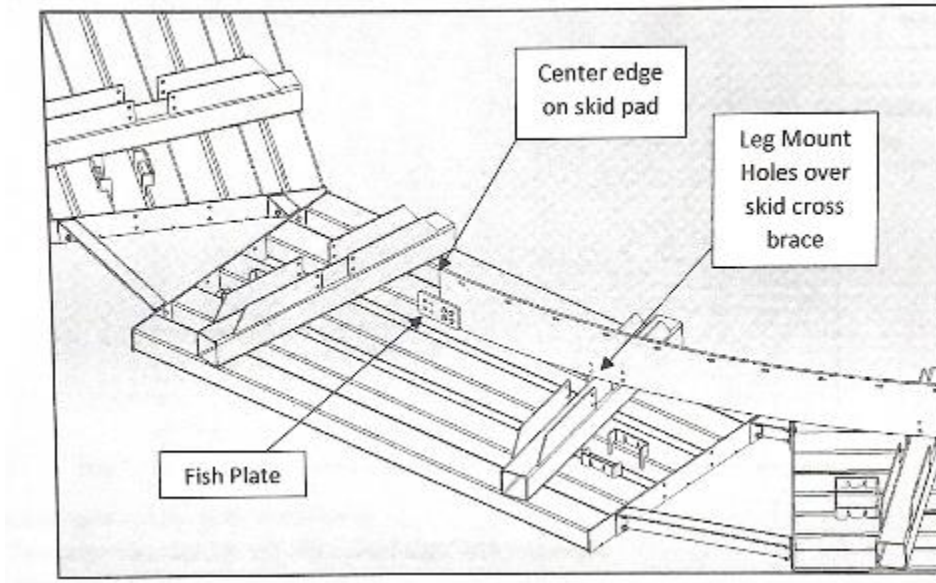


Figure 3 – Attach fishplate to ring using supplied ½" bolts

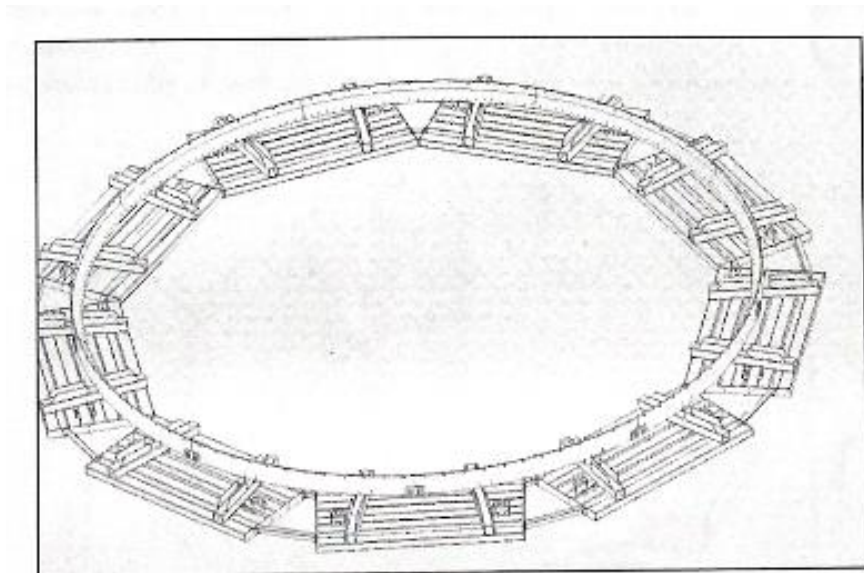


Figure 4 – Continue assembling ring until complete. Ensure seams are as tight as possible.

3. Assemble Upper Cone

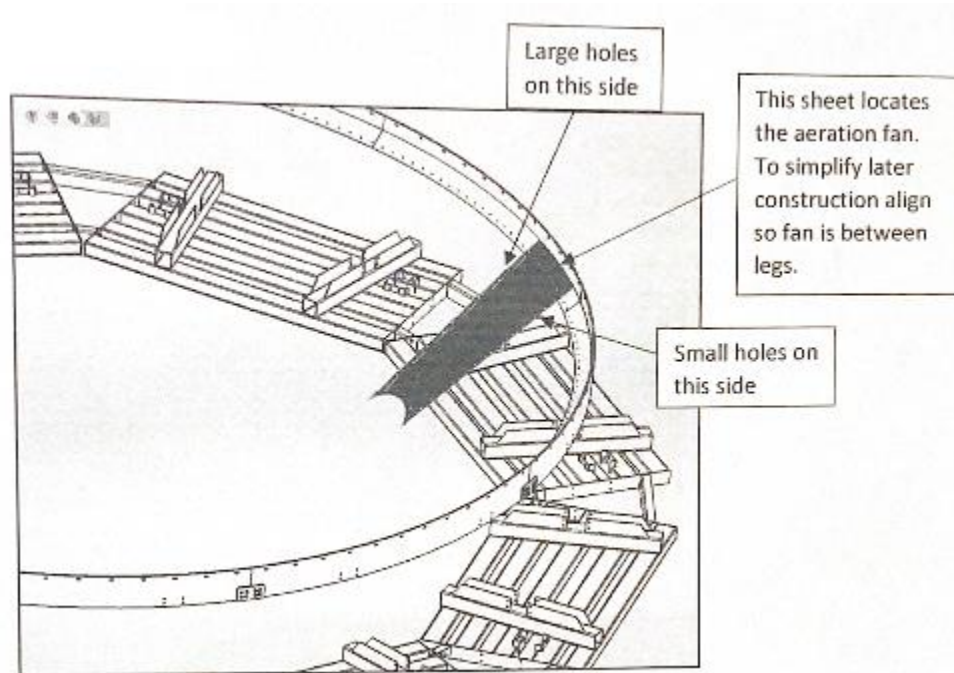


Figure 5 – Raise ring and start installing upper cone sheets using supplied 3/8" fin head bolts

- Only hand tighten bolts at this time.
- To prevent leakage, do not align sheet edge with ring edge.
- Raise ring until sheets are just off the ground or lightly touching the ground. This will minimize effort while installing sheets.
- Ensure sheet orientation is correct – the cone will assemble either way, but the aeration will not fit properly later.
- Going clockwise or counter clockwise does not matter, but being consistent does.

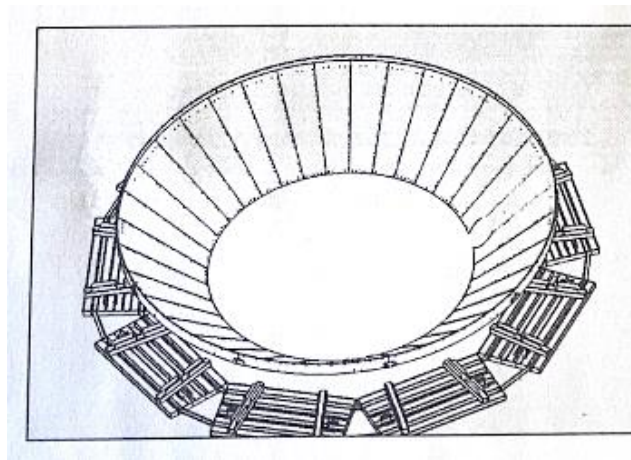


Figure 6 – Continue installing upper cone sheets

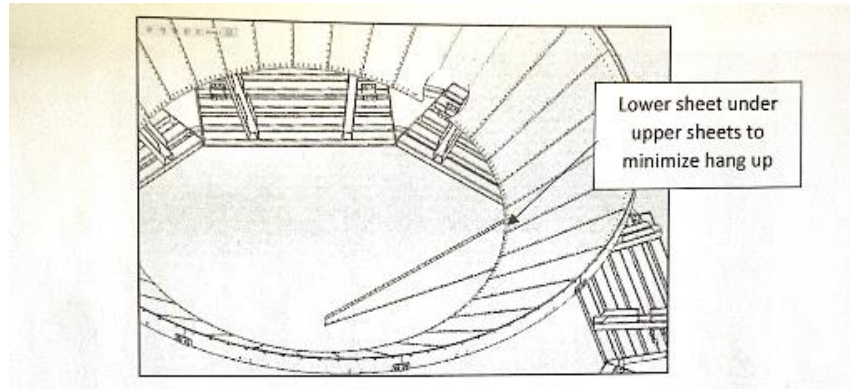


Figure 7 – Raise ring and upper sheets, and start attaching lower cone sheets

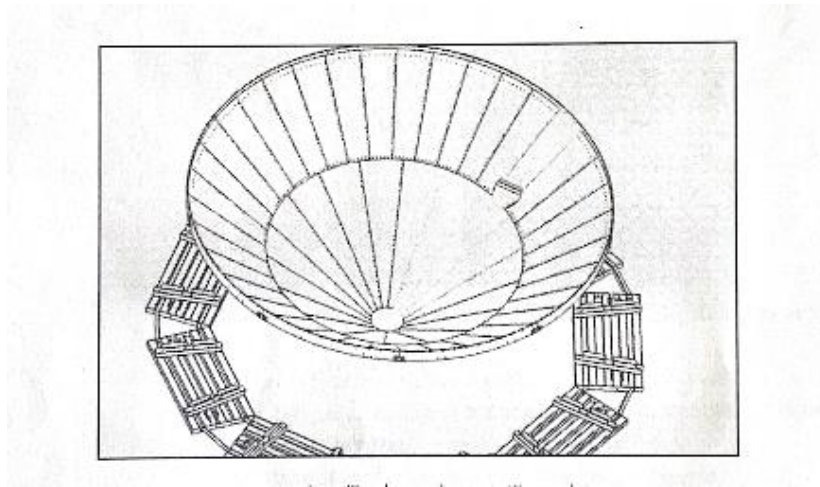


Figure 8 – Continue installing lower sheets until complete.

At this point, bolts for the cone can be tightened. Do not start in several spots – go around the cone starting in one line and working around the cone to finish at the same line – multiple starts will tighten the cone into more of an egg shape.

4. Leg Assembly

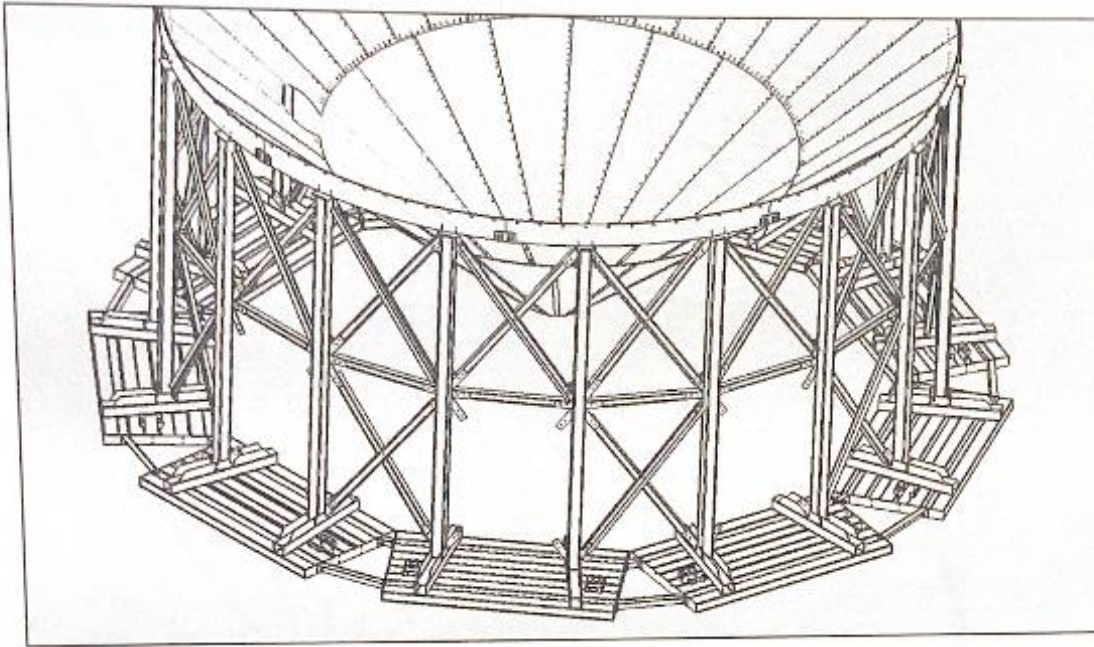


Figure 9 – Assembled with legs.

- Raise ring and cone assembly enough to fit legs underneath.
 - Attach legs to ring with supplied $\frac{1}{2}$ " bolts. Hand tighten only at this point.
 - Install cross bracing as shown with $\frac{1}{2}$ " bolts
 - Typically, the lower bracing is a much heavier metal than the upper bracing.
 - Do not forget the bolt in the center of the cross.
 - Lower and align legs into skid
 - Attach legs to skid using supplied $\frac{1}{2}$ " bolts. If installing a non-skid hopper, drill and anchor legs to cement pad.
 - Tighten all bolts at this time.

5. Aeration Assembly

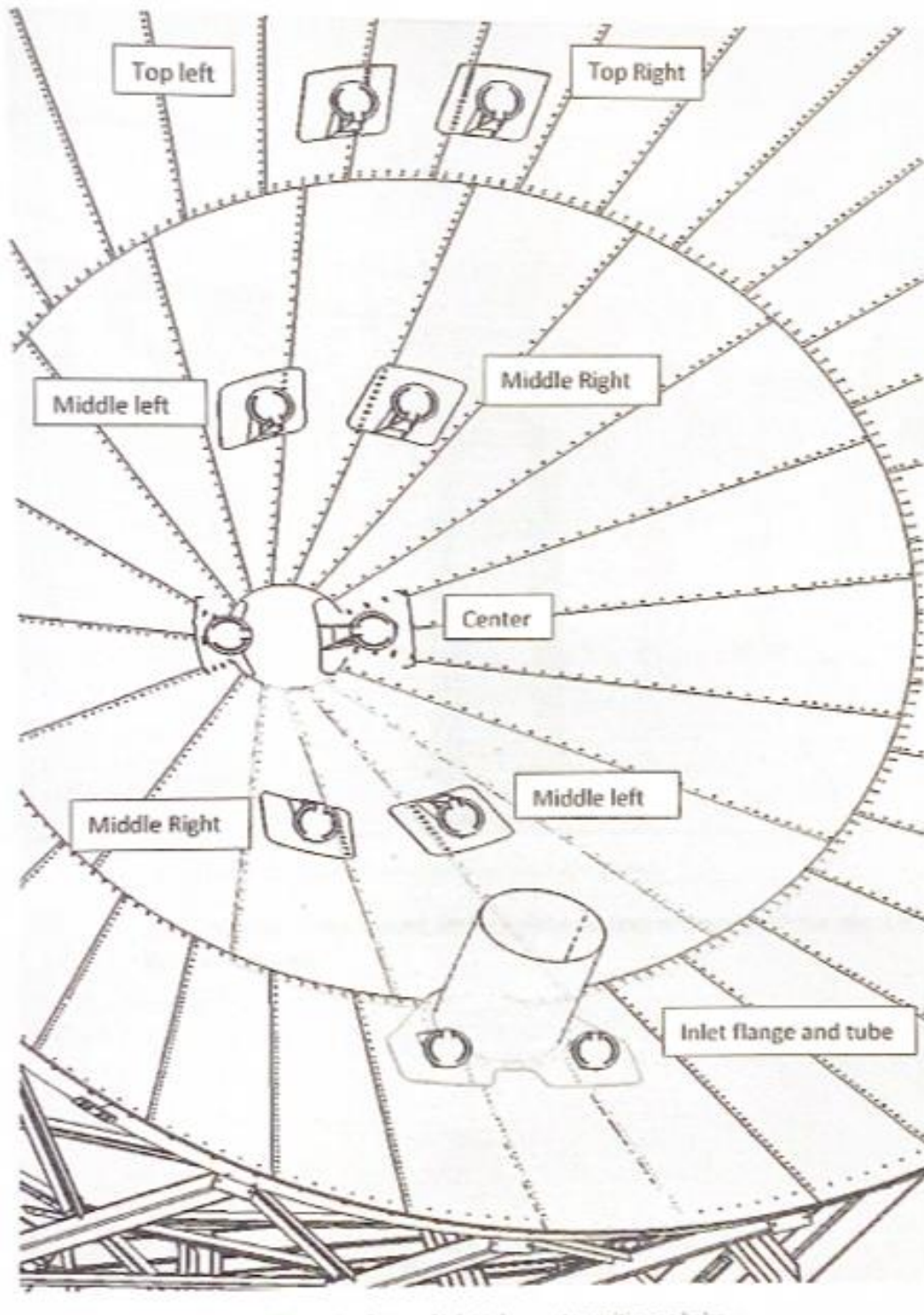


Figure 10 – Install aeration feet and inlet tube – note position on holes.

- Field drill extra holes in pad, and double the hole pattern 8" above and below pads.
- Place a bead of caulk along the top of the pads to minimize hang up.

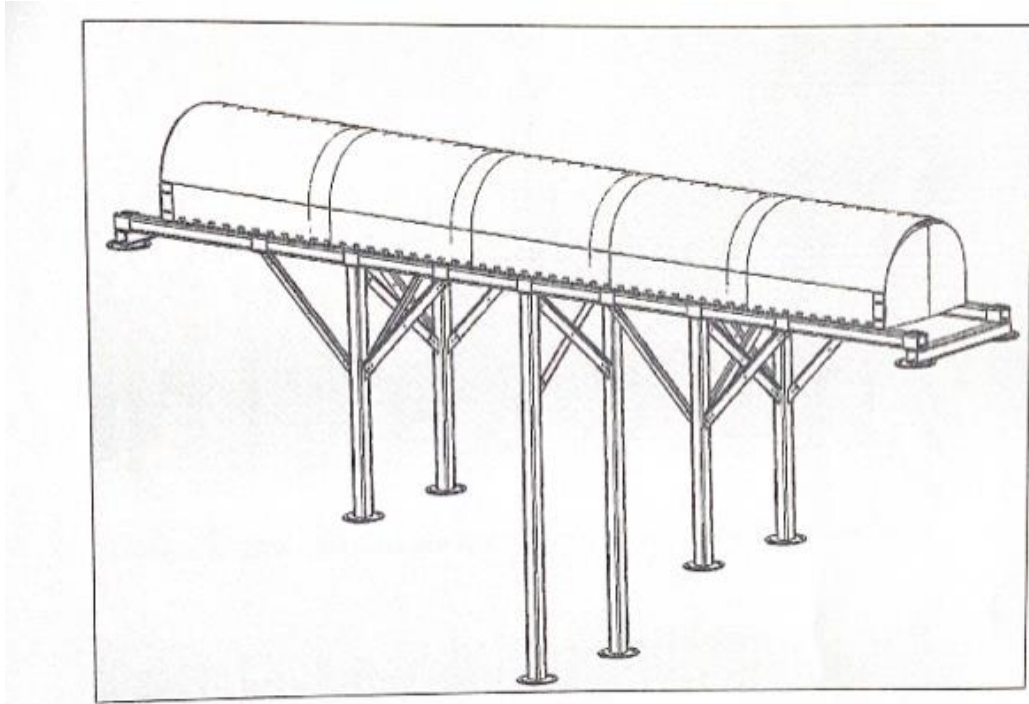


Figure 11 – Assemble aeration using supplied 3/8" bolts

- After aeration is assembled, lift and place on feet in hopper. Move legs along tube as required.

6. Manhole Assembly

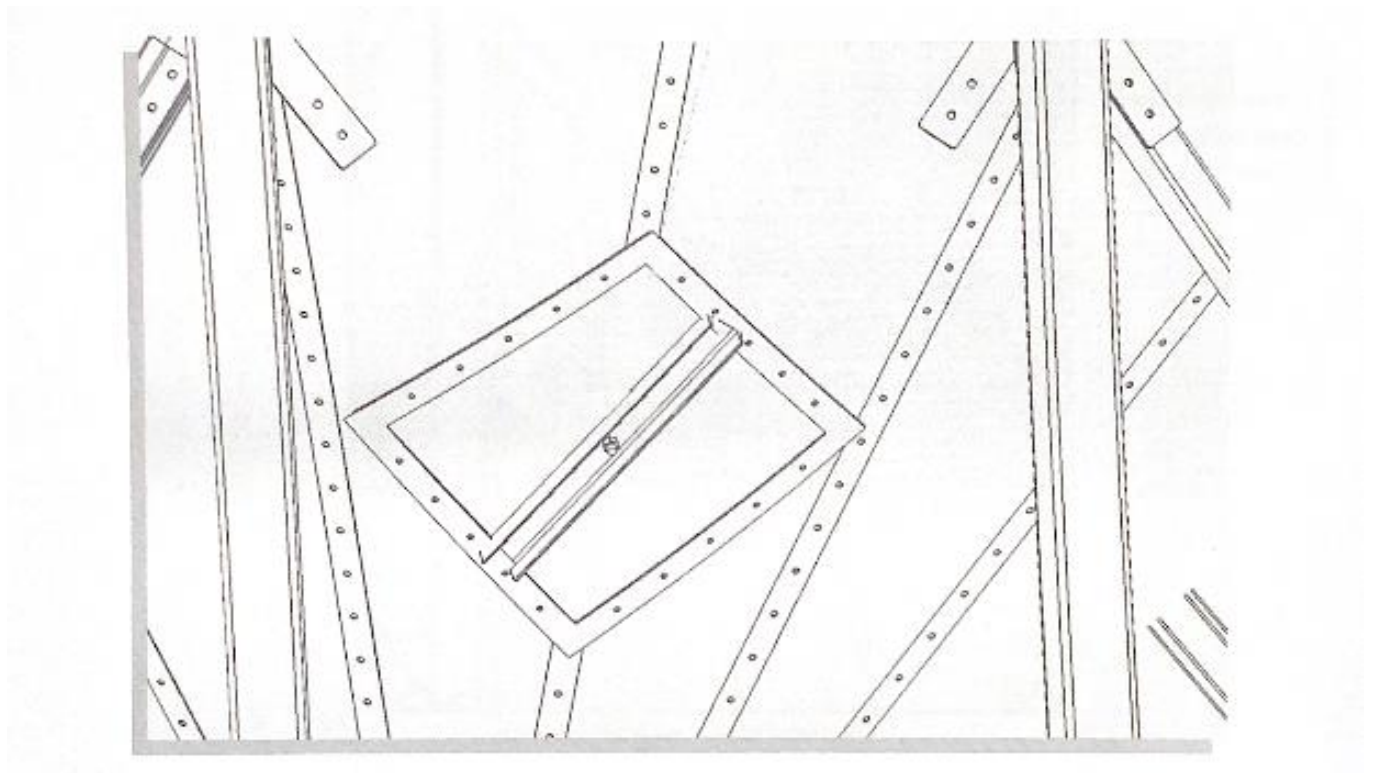


Figure 12 – Install manhole in pre-cut sheets.

- Caulk around inside seam.

7. Gate Assembly

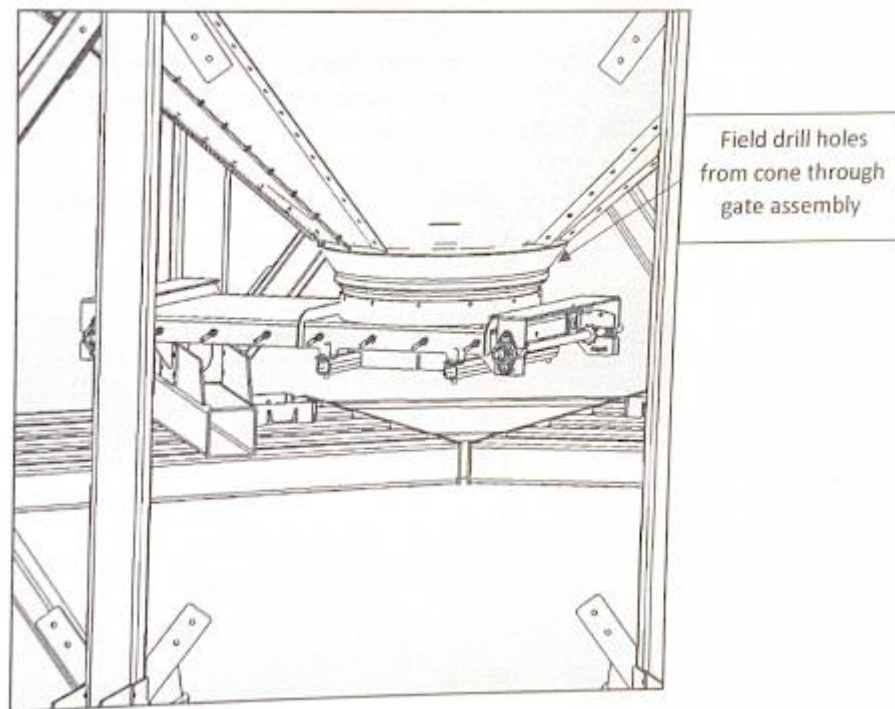


Figure 13 – Install pre-made gate assembly

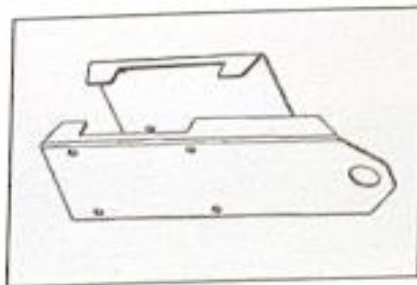


Figure 14 – Install shaft support bracket on leg and install gate-opening shaft through it

8. Bin Installation

- Lower bin over hopper, aligning stiffeners with legs.
- Attach bin to hopper with supplied bolts.
 - Place supplied collar/spacer behind stiffener when bolting to prevent kinking/crushing the stiffener
- Attach stiffener to legs with anchor plates

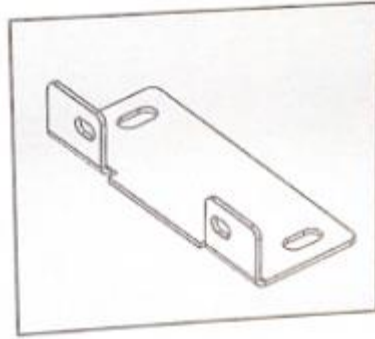


Figure 15 – Stiffener anchor plate

9. 30' Hopper Cones

- For the 30' hopper cones there will be 10 ring sections. We have made the legs hinged for easier assembly. You can attach the leg tops to the band, and put in a pin, and as it is lifted, the leg(s) will swing down underneath.

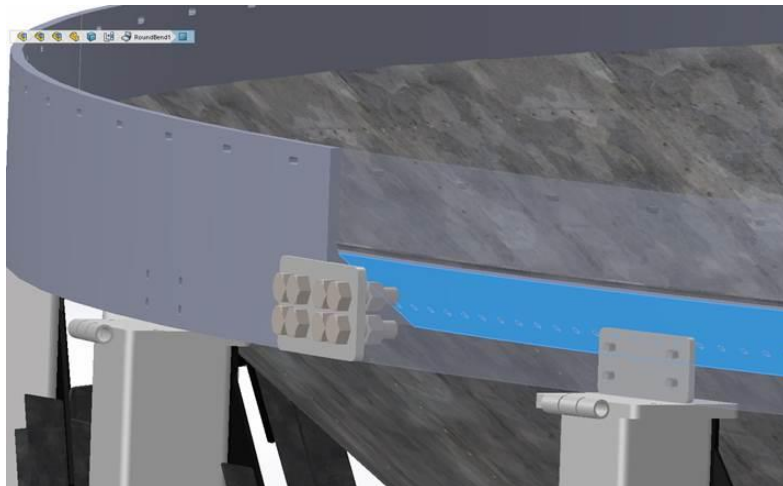


Figure 16 – Hinged legs

The leg positions for the aeration on the cone are a little different. Here is a picture of the cone if you were to look down onto it.

